

# WEST Search History

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DATE: Tuesday, May 10, 2005

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*DB=PGPB,USPT,EPAB,JPAB,DWPI; PLUR=YES; OP=ADJ*

<input type="checkbox"/>	L10	L9 or l5	5
<input type="checkbox"/>	L9	L8 and (chicken or chick or gallus)	1
<input type="checkbox"/>	L8	(l6 or L7) and receptor\$	19
<input type="checkbox"/>	L7	toogood-a\$.in.	1
<input type="checkbox"/>	L6	thorner-m\$.in.	33
<input type="checkbox"/>	L5	L4 and (chick or chicken or gallus)	4
<input type="checkbox"/>	L4	L1 adj3 receptor	13
<input type="checkbox"/>	L3	L1 (3adj) receptor	0
<input type="checkbox"/>	L2	L1 (3dj) receptor	0
<input type="checkbox"/>	L1	gfr or grhr or (growth hormone-releasing hormone)	2312

END OF SEARCH HISTORY

(FILE 'HOME' ENTERED AT 10:27:09 ON 10 MAY 2005)

FILE 'MEDLINE' ENTERED AT 10:27:15 ON 10 MAY 2005

L1 244 S (GHRH OR GRF) (2A) (RECEPTOR)  
L2 1 S L1 AND (CHICKEN OR CHICK OR GALLUS)  
L3 0 S (GROWTH HORMONE RELASING HORMONE) (2A) (RECEPTOR)  
L4 90 S (GROWTH HORMONE-RELEASING HORMONE) (2A) (RECEPTOR)  
L5 90 S (GROWTH HORMONE RELEASING HORMONE) (2A) (RECEPTOR)  
L6 90 S L4 OR L5  
L7 0 S L6 AND (CHICK OR CHICKEN OR GALLUS)

FILE 'CAPLUS, BIOSIS' ENTERED AT 10:30:33 ON 10 MAY 2005

L8 562 S L1  
L9 562 S (GHRH OR GRF) (2A) (RECEPTOR)  
L10 375 S (GROWTH HORMONE RELEASING HORMONE) (2A) (RECEPTOR)  
L11 697 S L9 OR L10  
L12 7 S L11 AND (CHICKEN OR CHICK OR GALLUS)  
L13 6 DUP REM L12 (1 DUPLICATE REMOVED)

ANSWER 3 OF 6 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

AN 2000:191714 BIOSIS

DN PREV2000000191714

TI Cloning of the **chicken growth hormone  
releasing hormone receptor**.

AU Toogood, A. A. [Reprint author]; Harvey, S.; Thorner, M. O. [Reprint  
author]; Gaylinn, B. D. [Reprint author]

CS Department of Internal Medicine, University of Virginia Health System,  
Charlottesville, VA, USA

SO Journal of Endocrinology, (March, 2000) Vol. 164, No. Suppl., pp. P185.  
print.

Meeting Info.: 19th Joint Meeting of the British Endocrine Societies, with  
the European Federation of Endocrine Societies. Birmingham, England, UK.  
March 13-16, 2000.

CODEN: JOENAK. ISSN: 0022-0795.

DT Conference; (Meeting)

Conference; Abstract; (Meeting Abstract)

LA English

ED Entered STN: 17 May 2000

PubMed

Nucleotide

Protein

Genome

Structure

PMC

Taxonomy

OMIM

Books

Search  for

Limits

Preview/Index

History

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Details

Range: from  to

Features: ☐ SNP ☐ CDD ☒ MGC ☐ HPRD ☐ STS

☐ 1: [XP\\_418490](#) Reports PREDICTED: simila...[gi:50732125]

[BLink](#), [Domains](#),  
[Links](#)

**LOCUS** XP\_418490 398 aa linear VRT 28-JUL-2004  
**DEFINITION** PREDICTED: similar to Growth hormone-releasing hormone receptor precursor (GHRH receptor) (GRF receptor) (GRFR) [Gallus gallus].  
**ACCESSION** XP\_418490  
**VERSION** XP\_418490.1 GI:50732125  
**DBSOURCE** REFSEQ: accession [XM\\_418490.1](#)  
**KEYWORDS** .  
**SOURCE** Gallus gallus (red jungle fowl)  
**ORGANISM** [Gallus gallus](#)  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae; Gallus.  
**COMMENT** **MODEL REFSEQ:** This record is predicted by automated computational analysis. This record is derived from an annotated genomic sequence ([NW\\_060264](#)) using gene prediction method: GNOMON, supported by EST [evidence](#).  
Also see:

[Documentation](#) of NCBI's Annotation Process

**FEATURES**  
**source** Location/Qualifiers  
1..398  
/organism="Gallus gallus"  
/strain="inbred line UCD001"  
/isolate="#256"  
/db\_xref="taxon:9031"  
/chromosome="2"  
/sex="female"  
/common="red jungle fowl"  
/note="inbred line derived from a wild population of red jungle fowl in Malaysia in the late 1930s, with the possible introgression of a limited amount of White Leghorn genome during its captive breeding history"  
**Protein** 1..398  
/product="similar to Growth hormone-releasing hormone receptor precursor (GHRH receptor) (GRF receptor) (GRFR)"  
**Region** 87..344  
/region\_name="7 transmembrane receptor (Secretin family)"  
/note="7tm\_2"  
/db\_xref="CDD:pfam00002"  
**CDS** 1..398  
/gene="LOC420385"  
/coded\_by="XM\_418490.1:73..1269"  
/db\_xref="GeneID:420385"  
/db\_xref="InterimID:420385"

**ORIGIN**

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1 msyhcvlytl tlavlvagnv hpecdfiael kkkeaeclen seehenatsa givrrnctkk
61 gwsepfpsyh iacpvedeip leeqsyfsti kiiytvgysl sitsliiavt vlmafrlrlc
121 prnyihiqlf ftfilkaiai fikdsvlfqe edidhcsfst teckisvvfc hyfmmtnfiw
181 llvealyinc lllsslshgr ryfwlwlvlfg wgfptlftfi wilakfyfed tacwdinqds
241 pywwlikgpi iisvgvnfvl finiiirillk kldprqinf nssqyrllsr stilliplfg
301 thyivfnflp eytslgirly lelciqsfqg fivallycfl nqevtaqdlv myyisirssq

```

361 edanesmkts diteaqkklr krqrmreqkk lkqgnlll  
//

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Feb 9 2005 14:31:10

Search  for

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Range: from  to 
 Features:
 ☐ SNP
 ☐ CDD
 ☒ MGC
 ☐ HPRD
 ☐ STS

☐ 1: [XP\\_425958](#). Reports **PREDICTED: simila...**[gi:50732615]

[BLink, Domains, Links](#)

**LOCUS** XP\_425958 499 aa linear VRT 28-JUL-2004  
**DEFINITION** PREDICTED: similar to growth-hormone releasing hormone-like peptide receptor [Gallus gallus].  
**ACCESSION** XP\_425958  
**VERSION** XP\_425958.1 GI:50732615  
**DBSOURCE** REFSEQ: accession [XM\\_425958.1](#)  
**KEYWORDS** .  
**SOURCE** Gallus gallus (red jungle fowl)  
**ORGANISM** [Gallus gallus](#)  
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae; Gallus.  
**COMMENT** **MODEL REFSEQ:** This record is predicted by automated computational analysis. This record is derived from an annotated genomic sequence ([NW\\_060264](#)) using gene prediction method: GNOMON.  
 Also see:

[Documentation](#) of NCBI's Annotation Process

**FEATURES**

	Location/Qualifiers
<b>source</b>	1..499 /organism="Gallus gallus" /strain="inbred line UCD001" /isolate="#256" /db_xref="taxon:9031" /chromosome="2" /sex="female" /common="red jungle fowl" /note="inbred line derived from a wild population of red jungle fowl in Malaysia in the late 1930s, with the possible introgression of a limited amount of White Leghorn genome during its captive breeding history"
<b><u>Protein</u></b>	1..499 /product="similar to growth-hormone releasing hormone-like peptide receptor"
<b><u>Region</u></b>	201..437 /region_name="7 transmembrane receptor (Secretin family)" /note="7tm_2" /db_xref="CDD:pfam00002"
<b><u>CDS</u></b>	1..499 /gene="LOC428397" /coded_by="XM_425958.1:1..1500" /db_xref="GeneID:428397" /db_xref="InterimID:428397"

**ORIGIN**

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1 mfilllkapvf nitkqeheps rvccaleaag yshpkfpihk qllegwkeqfr cfvlegvngg
61 krvlygktvs vvtqikifs lglqdfpqi tnpklqtgkk scpvcsgnhw nsrlfclcii
121 evvgihpeck ifqqvvkeea lclernesas pdlkgflqrn ctqeaywsep fpsyavacgf
181 degsskgped qksyysafwr vytagyaasv tsllitalivf aafrkfhctr nyihmhlfvs
241 filraiavft kdavlfadet mdhclmstva ckaavaffqf silanffwll iegiyqltll
301 lltfvsvdkqy vwwfifagwg aptavmltwv ltrlhqqntg cwdddengvv lwiikgpill
361 tvlinfiifi nvirilvhkl ksqeggggsns shfvrlakst llliplfgvh yivfaffpes
  
```

421 tglearlyie lglgsfqvqs elkkqlckwr yqeylsfthk qgtvsrensp vnyvtqlsl1  
481 eknsprkrkts ayqngvtsv

//

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[NCBI](#) | [NLM](#) | [NIH](#)

Feb 9 2005 14:51:10

AC AAW59861;  
 XX  
 DT 20-NOV-1998 (first entry)  
 XX  
 DE Amino acid sequence of the GRF#1 protein.  
 XX  
 KW Chicken; growth hormone releasing hormone; GRF; body fat;  
 KW pituitary adenylate cyclase-activating polypeptide; PACAP;  
 KW growth hormone; GH; pituitary cell; neuropeptide; antibody;  
 KW transgenic animal.  
 XX  
 OS Gallus sp.  
 XX  
 PN WO9832857-A1.  
 XX  
 PD 30-JUL-1998.  
 XX  
 PF 23-JAN-1998; 98WO-CA0000033.  
 XX  
 PR 23-JAN-1997; 97US-00789329.  
 XX  
 PA (UYVI-) UNIV VICTORIA INNOVATION & DEV CORP.  
 XX  
 PI Sherwood NGM, Mcrory JE;  
 XX  
 DR WPI; 1998-427953/36.  
 DR N-PSDB; AAV41891.  
 XX  
 PT Chicken neuro-peptide genes useful to modify poultry body  
 composition -  
 PT encode polypeptide(s) which stimulate release of pituitary growth  
 hormone  
 PT from chicken pituitary cells, useful to reduce poultry fat content.  
 XX  
 PS Claim 18; Page 35; 51pp; English.  
 XX  
 CC This is the amino acid sequence of the alternatively spliced  
 chicken  
 CC growth hormone releasing hormone #1 (GRF#1), used in conjunction  
 with the  
 CC pituitary adenylate cyclase-activating polypeptide (PACAP), used in  
 the  
 CC method of the invention involving the modification of the body  
 CC composition of fat in poultry. The nucleic acids can be used to  
 produce  
 CC polypeptides which stimulate the release of growth hormone (GH)  
 from  
 CC chicken pituitary cells e.g. by cultivating the cells of a  
 transformed  
 CC host and harvesting the polypeptide. GRF and PACAP neuropeptides  
 from  
 CC other species (e.g. rats) are known to stimulate GH release, and  
 previous  
 CC studies in humans have shown that GH can increase lean body mass  
 and  
 CC reduce fat content. The peptides may therefore be useful to control  
 CC growth rates and body composition in poultry, by stimulating GH  
 CC production, poultry with a lower fat content (desirable for both  
 dietary  
 CC and economic reasons) can be produced. The polypeptides may be





AC AAR66188;  
 DT 25-MAR-2003 (revised)  
 DT 28-JUN-1995 (first entry)  
 DE Sockeye salmon GHRH.  
 KW Sockeye salmon; growth hormone-releasing hormone-like peptide;  
 GHRH;  
 KW somatoliberin; pituitary adenylate-cyclase activating peptide;  
 PACAP;  
 KW hormone; transgenic fish.  
 OS Oncorhynchus nerka.  
 XX  
 PN WO9426897-A2.  
 PD 24-NOV-1994.  
 XX  
 PF 16-MAY-1994; 94WO-CA000280.  
 XX  
 PR 14-MAY-1993; 93US-00062472.  
 XX  
 PA (UYVI-) UNIV VICTORIA INNOVATION & DEV CORP.  
 PI Sherwood NG, Parker DB, Mcrory JE, Lescheid DW;  
 DR WPI; 1995-006793/01.  
 XX  
 PT DNA encoding fish neuro-peptide(s) which enhance the growth of fish  
 - and  
 PT encode pituitary adenylate cyclase activating polypeptide and  
 growth  
 PT hormone-releasing hormone-like peptide and their precursors.  
 XX  
 PS Claim 26; Page 54; 79pp; English.  
 XX  
 CC Sockeye salmon brain cDNA encoding GHRH-like peptide (AAR66188) and  
 PACAP  
 CC (AAR66189) was isolated and identified by PCR and RACE. The  
 isolated DNA  
 CC may be used for production of recombinant fish hormones or for  
 transgenic  
 CC fish breeding. (Updated on 25-MAR-2003 to correct PN field.)  
 XX  
 SQ Sequence 45 AA;

Query Match 87.4%; Score 97; DB 2; Length 45;  
 Best Local Similarity 87.0%; Pred. No. 3.4e-07;  
 Matches 20; Conservative 1; Mismatches 2; Indels 0;  
 Gaps 0;

Qy 1 SKAYRKLLGQLSARLYLHSLMAK 23  
 :||||| ||||||| |||||||  
 Db 7 NKAYRKALGQLSARKYLHSLMAK 29

```

Sequence 4, Application US/08789329C
; Patent No. 6165755
; GENERAL INFORMATION:
; APPLICANT: SHERWOOD ET AL.
; TITLE OF INVENTION: CHICKEN NEUROPEPTIDE GENE USEFUL
; TITLE OF INVENTION: FOR IMPROVED POULTRY PRODUCTION
; NUMBER OF SEQUENCES: 20
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Klarquist Sparkman Campbell Leigh &
; ADDRESSEE: Whinston, LLP
; STREET: One World Trade Center
; STREET: 121 S.W. Salmon Street
; STREET: Suite 1600
; CITY: Portland
; STATE: Oregon
; COUNTRY: United States of America
; ZIP: 97204-2988
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Disk, 3-1/2 inch
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: Windows NT
; SOFTWARE: WordPerfect 7.0 & ASCII
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/789,329C
; FILING DATE: 01/23/97
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Earp, David J.
; REGISTRATION NUMBER: 41,401
; REFERENCE/DOCKET NUMBER: 2847-46468/DJE
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (503) 226-7391
; TELEFAX: (503) 228-9446
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 46 aa
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-789-329C-4

Query Match          93.7%;   Score 104;   DB 3;   Length 46;
Best Local Similarity 95.7%;   Pred. No. 3.6e-09;
Matches 22;   Conservative 0;   Mismatches 1;   Indels 0;
Gaps 0;

Qy      1 SKAYRKLLGQLSARLYLHSLMAK 23
        ||||||||||||||| |||||
Db      7 SKAYRKLLGQLSARNYLHSLMAK 29

```

ID PACA\_CHICK STANDARD; PRT; 175 AA.  
 AC P41534;  
 DT 01-NOV-1995 (Rel. 32, Created)  
 DT 15-JUL-1998 (Rel. 36, Last sequence update)  
 DT 25-JAN-2005 (Rel. 46, Last annotation update)  
 DE Glucagon-family neuropeptides precursor [Contains: Growth hormone-  
 DE releasing factor 1-46 (GRF) (Growth hormone-releasing hormone)  
 (GHRH);  
 DE Pituitary adenylate cyclase activating polypeptide-27 (PACAP-27)  
 DE (PACAP27); Pituitary adenylate cyclase activating polypeptide-38  
 DE (PACAP-38) (PACAP38)].  
 GN Name=ADCYAP1;  
 OS Gallus gallus (Chicken).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae;  
 Phasianinae;  
 OC Gallus.  
 OX NCBI\_TaxID=9031;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RX MEDLINE=97174314; PubMed=9022048;  
 RA McRory J.E., Parker R.L., Sherwood N.M.;  
 RT "Expression and alternative processing of a chicken gene encoding  
 both  
 RT growth hormone-releasing hormone and pituitary adenylate cyclase-  
 RT activating polypeptide.";  
 RL DNA Cell Biol. 16:95-102(1997).  
 RN [2]  
 RP SEQUENCE OF 131-168.  
 RA Yasuhara T., Mizuno K., Somogyvari-Vigh A., Komaki G., Arimura A.;  
 RT "Isolation and primary structure of chicken PACAP.";  
 RL Regul. Pept. 37:326-326(1992).  
 CC -!- FUNCTION: Primary role of GRF is to release GH from the  
 pituitary.  
 CC -!- FUNCTION: PACAP plays pivotal roles as a neurotransmitter  
 and/or a  
 CC neuromodulator.  
 CC -!- SUBCELLULAR LOCATION: Secreted.  
 CC -!- ALTERNATIVE PRODUCTS:  
 CC Event=Alternative splicing; Named isoforms=3;  
 CC Name=GRF 1-46;  
 CC IsoId=P41534-1; Sequence=Displayed;  
 CC Name=GRF 1-43;  
 CC IsoId=P41534-2; Sequence=VSP\_001760;  
 CC Name=GRF 33-46;  
 CC IsoId=P41534-3; Sequence=VSP\_001759;  
 CC -!- SIMILARITY: Belongs to the glucagon family.  
 CC

--  
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 collaboration  
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 outstation -  
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 CC use by non-profit institutions as long as its content is in  
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 CC modified and this statement is not removed. Usage by and for  
 commercial



US-08-062-472B-6  
 ; Sequence 6, Application US/08062472B  
 ; Patent No. 5695954  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Sherwood, Nancy G M  
 ; APPLICANT: Parker, David B  
 ; APPLICANT: McRory, John E  
 ; APPLICANT: Lescheid, David W  
 ; TITLE OF INVENTION: DNA ENCODING TWO FISH NEUROPEPTIDES  
 ; NUMBER OF SEQUENCES: 49  
 ; CURRENT APPLICATION DATA:  
 ; APPLICATION NUMBER: US/08/062,472B  
 ; FILING DATE: 14-MAY-1993  
 ; INFORMATION FOR SEQ ID NO: 6:  
 ; SEQUENCE CHARACTERISTICS:  
 ; LENGTH: 173 amino acids  
 ; TYPE: amino acid  
 ; STRANDEDNESS: single  
 ; TOPOLOGY: linear  
 ; MOLECULE TYPE: peptide  
 US-08-062-472B-6

Query Match 87.4%; Score 97; DB 1; Length 173;  
 Best Local Similarity 87.0%; Pred. No. 1.6e-07;  
 Matches 20; Conservative 1; Mismatches 2; Indels 0;  
 Gaps 0;

Qy 1 SKAYRKLLGQLSARLYLHSLMAK 23  
 :||||| ||||| |||||  
 Db 88 NKAYRKALGQLSARKYLHSLMAK 110

S34767  
neuropeptides precursor [similarity] - sockeye salmon  
N;Contains: growth hormone-releasing hormone; pituitary adenylate cyclase-activating polypeptide  
C;Species: Oncorhynchus nerka (sockeye salmon)  
C;Date: 06-Jan-1995 #sequence\_revision 06-Jan-1995 #text\_change 09-Jul-2004  
C;Accession: S34767; S34766  
R;Parker, D.B.; Coe, I.R.; Dixon, G.H.; Sherwood, N.M.  
Eur. J. Biochem. 215, 439-448, 1993  
A;Title: Two salmon neuropeptides encoded by one brain cDNA are structurally related to members of the glucagon superfamily.  
A;Reference number: S34766; MUID:93345532; PMID:8344311  
A;Accession: S34767  
A;Molecule type: mRNA  
A;Residues: 1-173 <PAR1>  
A;Cross-references: UNIPROT:P41585; EMBL:X73233; NID:g396194; PIDN:CAA51705.1; PID:g396195  
A;Experimental source: clones SS/PCR 4 and SS/RACE 2  
A;Accession: S34766  
A;Molecule type: mRNA  
A;Residues: 1-21,'S',23-60,'P',62-77,'G',79-121,'T',123-164,'N',166-170,'G',172-173 <PAR2>  
A;Cross-references: EMBL:X73233; NID:g396194; PIDN:CAA51705.1; PID:g396195  
A;Experimental source: clones SS/PCR 5 and SS/RACE 7  
A;Note: the GenBank entry ONNEUR, release 117.0, has ambiguous nucleotides for the positions where these clones differ and translates the corresponding residues with 'X'  
C;Superfamily: glucagon  
C;Keywords: amidated carboxyl end; duplication; neuropeptide  
F;1-21/Domain: signal sequence #status predicted <SIG>  
F;82-126/Product: growth hormone-releasing hormone #status predicted <GHR>  
F;129-166/Product: pituitary adenylate cyclase-activating polypeptide #status predicted <PAP>  
F;166/Modified site: amidated carboxyl end (Lys) (in mature form from following glycine) #status predicted

Query Match 87.4%; Score 97; DB 2; Length 173;  
Best Local Similarity 87.0%; Pred. No. 3.9e-08;  
Matches 20; Conservative 1; Mismatches 2; Indels 0;  
Gaps 0;

Qy 1 SKAYRKLLGQLSARLYLHSLMAK 23  
:||||| ||||| |||||  
Db 88 NKAYRKALGQLSARKYLHSLMAK 110

ID PACA\_ONCNE STANDARD; PRT; 173 AA.  
 AC P41585;  
 DT 01-NOV-1995 (Rel. 32, Created)  
 DT 01-NOV-1995 (Rel. 32, Last sequence update)  
 DT 25-OCT-2004 (Rel. 45, Last annotation update)  
 DE Glucagon-family neuropeptides precursor [Contains: Growth hormone-  
 DE releasing factor (GRF) (Growth hormone-releasing hormone) (GHRH);  
 DE Pituitary adenylate cyclase activating polypeptide (PACAP)].  
 OS Oncorhynchus nerka (Sockeye salmon).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Actinopterygii; Neopterygii; Teleostei; Euteleostei;  
 OC Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.  
 OX NCBI\_TaxID=8023;  
 RN [1]  
 RP SEQUENCE FROM N.A., AND ALTERNATIVE SPLICING.  
 RC TISSUE=Brain;  
 RX MEDLINE=93345532; PubMed=8344311;  
 RA Parker D.B., Coe I.R., Dixon G.H., Sherwood N.M.;  
 RT "Two salmon neuropeptides encoded by one brain cDNA are  
 structurally  
 RT related to members of the glucagon superfamily."  
 RL Eur. J. Biochem. 215:439-448(1993).  
 CC -!- FUNCTION: Primary role of GHRH is to release GH from the  
 CC pituitary.  
 CC -!- FUNCTION: PACAP plays pivotal roles as a neurotransmitter  
 and/or a  
 CC neuromodulator.  
 CC -!- SUBCELLULAR LOCATION: Secreted.  
 CC -!- ALTERNATIVE PRODUCTS:  
 CC Event=Alternative splicing; Named isoforms=2;  
 CC Name=Long;  
 CC IsoId=P41585-1; Sequence=Displayed;  
 CC Name=Short;  
 CC IsoId=P41585-2; Sequence=VSP\_001762, VSP\_001763;  
 CC Note=Lacks the GHRH-like sequence;  
 CC -!- POLYMORPHISM: Four clones were identified that had nucleotide  
 CC differences.  
 CC -!- SIMILARITY: Belongs to the glucagon family.  
 CC

--  
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 CC

--  
 DR EMBL; X73233; CAA51705.1; ALT\_SEQ.  
 DR PIR; S34767; S34767.  
 DR HSSP; P18509; 1GEA.